2013003637

MACON CO, NC FEE \$0.00 PRESENTED & RECORDED:

05-22-2013 10:32:22 AM

TODD RABY REGISTER OF DEEDS BY: TODD RABY REGISTER

BK: CRP Q-35 PG: 710-727

Fac/Perm/Co ID #	Date	Doc ID#
57-04	6,4,13	19093

NOTE: THE SPACE ABOVE IS FOR THE REGISTER OF DEEDS USE

This page is provided for recordation purposes. The **entire document**, including this page, should be recorded at the Register of Deeds and indexed as follows:

**Grantor/Landowner:** MACON COUNTY

Grantee/Holder of Permit: NC DEPARTMENT OF ENVIRONMENT AND NATURAL

**RESOURCES** 

**Document Type:** PERMIT

The property is identified by the deeds recorded as listed below:

Macon County, N.C. Register of Deeds				
Book	Page	Acreage	Landowner	PIN
K-19	2201- 2206	89.8±	Macon County	7448989214
		89.8±	Total Facility Acreage	

#### Notes:

1. Deed book references are from the Macon County GIS website (http://gis2.maconnc.org/lightmap/Maps/default.aspx) accessed April 2013.

THE PURPOSE OF THIS RECORDATION IS TO NOTIFY FUTURE BUYERS OF SAID PROPERTY THAT A SOLID WASTE MANAGEMENT FACILITY HAS OPERATED ON THE PROPERTY.

I do hereby certify that the attached PERMIT is an exact and true original of PERMIT NUMBER 5704 for the Macon County Solid Waste Management Facility.

Allen Gaither
Environmental Engineer
Permitting Branch
Solid Waste Section
Division of Waste Management

North Carolina

Buncombe County

I, Lagace Notary Public for Combe County,

North Carolina, do hereby certify that Allen Gaither, Environmental Engineer of the Permitting Branch, Solid Waste Section, Division of Waste Management, NCDENR, personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal,

This the ITH day of May , 20 13.

OFFICIAL SEAL

NOTARY PUBLIC

NOTARY PUBLIC

NOTARY PUBLIC

My commission expires Sunlary 3, 2015

Note to Register of Deeds: This certified original permit shall be recorded by the Register of Deeds and indexed in the grantor index under the name of the land owner. The certified original affixed with the Register's seal and the date, book, and page number of recording shall be returned to the Mr. Allen Gaither, Division of Waste Management, Solid Waste Section, 2090 US Highway 70, Swannanoa, NC 28778.



Facility Permit No: 5704 Macon County Issuance Date: May 15, 2013 Doc ID: 18851 Page 1 of 16

North Carolina Department of Environment and Natural Resources

Division of Waste Management

Dexter R. Matthews
Director

John E. Skvarla, III Secretary

OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT
SOLID WASTE SECTION

### SOLID WASTE MANAGEMENT FACILITY Permit No. 5704

MACON COUNTY is hereby issued a

#### PERMIT TO CONSTRUCT

**NOT APPLICABLE** 

### PERMIT TO OPERATE

5704T-TRANSFER-2008 HIGHLANDS MSW TRANSFER STATION

### PERMIT FOR CLOSURE

5704-CDLF-1993 HIGHLANDS C&D LANDFILL FACILITY

Located at 1080 Rich Gap Road, in Highlands, Macon County, North Carolina, in accordance with Article 9, Chapter 130A, of the General Statutes of North Carolina and all rules promulgated thereunder and subject to the conditions set forth in this permit. The legal description of the site is identified on the deeds recorded for this property listed in Attachment 1, Part I of this permit.

Entry P.E. our

Digitally signed by Edward F. Mussler III, P.E. DN: cn=Edward F. Mussler III,

P.E., o=Solid Waste Section, ou=NC DWM, email=ed.mussler@ncdenr.gov,

c=US
Date: 2013.05.16 15:31:05 -04'00'

Edward F. Mussler, III, P.E., Permitting Branch Supervisor Solid Waste Section

1646 Mail Service Center, Raleigh, North Carolina 27699-1646 Phone/Fax 919-707-8200 \ Internet: http://portal.ncdenr.org/web/wm/sw An Equal Opportunity / Affirmative Action Employer – Printed on Dual Purpose Paper

Pat McCrory

Governor

NorthCarolina *Naturally* 

Facility Permit No: 5704 Macon County Error! Reference source not found.: May 15, 2013 Doc ID: 18851 Page 2 of 16

# **ATTACHMENT 1**GENERAL PERMIT CONDITIONS/INFORMATION

#### PART I: GENERAL FACILITY

- 1. This permit is issued by the North Carolina Department of Environment and Natural Resources, Division of Waste Management, Solid Waste Section (Section). In accordance with North Carolina Solid Waste Management Rule 15A NCAC 13B .0201(d), a solid waste management facility permit shall have two parts: a Permit to Construct and a Permit to Operate. The Permit to Construct must be implemented in accordance with Attachment 2 of this permit. The Permit to Operate must be implemented in accordance with Attachment 3 of this permit.
- 2. The persons to whom this permit is issued ("permittee") are the owners and operators of the solid waste management facility.
- 3. This permit shall not be effective until the certified copy of this permit which references legal descriptions for all land within the solid waste management facility boundary is recorded in the Register of Deeds office and indexed in the grantor index under the name of the owner of the land in the county or counties in which the land is located. The certified copy of the permit affixed with the Register's seal and the date, book, and page number of recording must be returned to the Solid Waste Section within thirty (30) calendar days of issuance of this permit. If the Solid Waste Section does not receive the certified copy of the recorded permit within 30 calendar days of issuance of the permit, then and in that event, the permit is suspended and of no effect until the date the Solid Waste Section receives the certified copy of the recorded permit.
- 4. When this property is sold, leased, conveyed, or transferred in any manner, the deed or other instrument of transfer shall contain in the description section in no smaller type than that used in the body of the deed or instrument, a statement that the property has been used as a sanitary landfill and a reference by book and page to the recordation of the permit.
- 5. By receiving waste at this facility the permittee shall be considered to have accepted the terms and conditions of this permit.
- 6. Operation of this solid waste management facility must be in accordance with the Solid Waste Management Rules, 15A NCAC 13B, Article 9 of the Chapter 130A of the North Carolina General Statutes (NCGS 130A-290, et seq.), the conditions contained in this permit; and the approved plan. Should the approved plan and the rules conflict, the Solid Waste Management Rules shall take precedence unless specifically addressed by permit condition. Failure to comply may result in compliance action or permit revocation.

Facility Permit No: 5704

Macon County Error! Reference source not found.: May 15, 2013

Doc ID: 18851 Page 3 of 16

- 7. This permit is issued based on the documents submitted in support of the application for permitting the facility including those identified in the "List of Documents for the Approved Plan" which constitute the approved plan for the facility. Where discrepancies exist, the most recent submittals and the Conditions of Permit shall govern.
- 8. This permit may be transferred only with the approval of the Section, through the issuance of a new or substantially amended permit in accordance with applicable statutes and rules. In accordance with NCGS 130A-295.2(g) the permittee shall notify the Section thirty (30) days prior to any significant change in the identity or business structure of either the owner or the operator, including but not limited to a proposed transfer of ownership of the facility or a change in the parent company of the owner or operator of the facility.
- 9. The permittee is responsible for obtaining all permits and approvals necessary for the development of this project including approval from appropriate agencies for a General or Individual NPDES Stormwater Discharge Permit. Issuance of this permit does not remove the permittee's responsibilities for compliance with any other local, state or federal rule, regulation or statute.

Properties Approved for the Solid Waste Facility

Macon County, N.C. Register of Deeds				
Book	Page	Acreage	Landowner	PIN
K-19	2201- 2206	89.8±	Macon County	7448989214
		89.8±	Total Facility Acreage	

#### Notes:

1. Deed book references are from the Macon County GIS website (http://gis2.maconnc.org/lightmap/Maps/default.aspx) accessed April 2013.

PART II: MUNICIPAL SOLID WASTE LANDFILL UNIT(S)

Not Applicable

PART III: CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL UNIT(S)

#### **Permitting History**

- 1. A Permit to Construct/Operate was issued on June 8, 1993 for a new construction and demolition (C&D) landfill facility.
- 2. On July 7, 1998 a modification was made to the Permit for the five-year renewal of C&D landfill facility operations.

- 3. On October 7, 2004 a modification was made to the Permit for the five-year renewal of C&D landfill facility operations.
- 4. On May 15, 2013 an amendment was made to the Permit for closure of the C&D landfill facility.

No.	Permit Type	Date Issued	Document ID No.
1.	Permit to Construct/Operate	June 8, 1993	
2.	Permit Modification	July 7, 1998	
3.	Permit Amendment	October 7, 2004	
4.	Permit Amendment	May 15, 2013	18851

List of Documents for the Approved Plan

The descriptions of previous/historical documents are found in the Permit to Operate issued October 7, 2004, DIN 18973.

DOCUMENT ID NO.	DOCUMENT DESCRIPTION	
5087	Closure and Post-closure Plan Highlands C&D Landfill, Macon County	
	North Carolina. Prepared by: McGill Associates, Asheville, NC.	
	Prepared for: Macon County, NC. Dated June 2008.	
5120	Letter: Operational Changes at the Highlands Construction and	
	Demolition Landfill. Prepared by: Mr. Chris Stahl. Prepared for: Macon	
	County. June 27, 2008.	
7515	Revisions to the Closure Plan, Closure of the Highlands C&D Landfill.	
	Prepared by: McGill Associates. Prepared for: Macon County. May 20,	
	2009.	
7516	Letter: Approval-Revision to the Closure Plan (with conditions).	
	Prepared by: Allen Gaither. Prepared for: Solid Waste Section. May 12,	
	2009.	
8538	Closure Documentation (Certification) Highlands Construction &	
	Demolition Landfill. Prepared by: McGill Associates. Prepared for:	
	Macon County. August 31, 2009.	

PART IV: INDUSTRIAL LANDFILL UNIT(S)

Not Applicable

PART V: LAND CLEARING AND INERT DEBRIS LANDFILL UNIT(S)

Not Applicable

## PART VI: TRANSFER STATION/TREATMENT & PROCESSING UNIT(S)

### **Permitting History**

- 1. On December 6, 2007 an amendment was made to the Permit for construction and operation of a new transfer facility.
- 2. On May 15, 2013 an amendment was made to the Permit for the five-year renewal of transfer facility operations.

No.	Permit Type	Date Issued	Document ID No.
1.	Permit Amendment	December 6, 2007	3405
2.	Permit Amendment	May 15, 2013	18851

List of Documents for the Approved Plan

<b>DOCUMENT ID NO.</b>	DOCUMENT DESCRIPTION	
3437	Operations Plan, MSW and C&D Waste Transfer Station at the	
•	Highlands C&D Landfill, Macon County, North Carolina. Prepared for	
	Macon County. Prepared by McGill Associates, Asheville, NC.	
	September 14, 2007.	
3438	Permit Drawings MSW/ C&D Waste Transfer Station at the Highlands	
	C&D Landfill, Macon County, North Carolina. Prepared for Macon	
	County. Prepared by McGill Associates, Asheville, NC. September 14,	
	2007. 7 Sheets.	
15534	Letter: Trailer Staging Area Improvements, Highlands MSW/C&D	
	Transfer Station. Prepared by: McGill Associates. Prepared for: Macon	
	County. November 2, 2011.	
15604	Letter: Authorization-Trailer Staging Area Improvements. Prepared by:	
	Allen Gaither. Prepared for: Solid Waste Section. November 18, 2011.	
18775	Permit Renewal Application for MSW and C&D Solid Waste Transfer	
	Station at the Highlands C&D Landfill. Prepared by: McGill Associates.	
****	Prepared for: Macon County. April 3, 2013	
18776	Letter: Permit Application Renewal. Prepared by: Mr. Chris Stahl.	
	Prepared for: Macon County. April 3, 2013	

PART VII: MISCELLANEOUS SOLID WASTE MANAGEMENT Not Applicable

Facility Permit No: 5704 Macon County Errorl Reference source not found.: May 15, 2013 Doc ID: 18851 Page 6 of 16

# ATTACHMENT 2 CONDITIONS OF PERMIT TO CONSTRUCT

PART I: GENERAL FACILITY

Not Applicable

PART II: MUNICIPAL SOLID WASTE LANDFILL UNIT(S)

Not Applicable

PART III: CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL UNIT(S)

Not Applicable

PART IV: INDUSTRIAL LANDFILL UNIT(S)

Not Applicable

PART V: LAND CLEARING AND INERT DEBRIS LANDFILL UNIT(S)

Not Applicable

PART VI: TRANSFER STATION/TREATMENT & PROCESSING UNIT(S)

Not Applicable

PART VII: MISCELLANEOUS SOLID WASTE MANAGEMENT

Not Applicable

- End of Section-

Facility Permit No: 5704 Macon County Error! Reference source not found.: May 15, 2013 Doc ID: 18851 Page 7 of 16

# ATTACHMENT 3 CONDITIONS OF PERMIT TO OPERATE

PART I: GENERAL FACILITY

Not Applicable

PART II: MUNICIPAL SOLID WASTE LANDFILL UNIT(S)

Not Applicable

PART III: CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL UNIT(S)

Not Applicable

PART IV: INDUSTRIAL LANDFILL UNIT(S)

Not Applicable

PART V: LAND CLEARING AND INERT DEBRIS LANDFILL UNIT(S)

Not Applicable

### PART VI - TRANSFER STATION/TREATMENT & PROCESSING UNIT(S)

- 1. The Permit to Operate shall expire May 15, 2018. Pursuant to 15A NCAC 13B .0201(e), no later than November 15, 2017, the owner or operator must submit a request to the Section for permit review and must update pertinent facility plans including, but not limited to, the facility operation and waste screening plans.
- 2. The facility is permitted to receive solid waste as defined in NCGS 130A -290 (35).
- 3. The following, at a minimum, must not be accepted for disposal at the facility; hazardous waste, liquid wastes, regulated medical waste, sharps not properly packaged, regulated-asbestos containing material as defined in 40 CFR 61, PCB waste as defined in 40 CFR 761, and wastes banned from disposal in North Carolina by G.S. 130A-309.10(f).
- 4. This facility is permitted to receive municipal solid waste generated within Macon County and the Town of Highlands. Waste must be transported for disposal to the Macon County MSW Landfill Facility, Permit number 5703-MSWLF-1992. Proposed modifications of the service area and/or the disposal facility constitute a permit modification and are subject to a permitting fee and must be approved by the Section.
- 5. The permittee must not knowingly dispose of, or accept for transfer for subsequent disposal, municipal solid waste that is generated within the boundaries of a unit of local government that by ordinance:
  - a. Prohibits generators or collectors of municipal solid waste from disposing of that type or form of municipal solid waste.

- Requires generators or collectors of municipal solid waste to recycle that type or b. form of municipal solid waste.
- 6. A responsible individual trained and certified in facility operations must be on-site at all times during all operating hours of the facility, in accordance with G.S. 130A-309.25.
- 7. The permittee must develop, and use, a training and screening program at the facility for detecting and preventing unauthorized wastes from being accepted at the facility. At a minimum, the program must include:
  - Random inspections of incoming loads or other comparable procedures. a.
  - b. Records of all inspections.
  - Training of personnel to recognize hazardous, liquid and other excluded waste c.
- 8. The facility must not cause nuisance conditions.
  - The tipping floor and transfer trailer loading area must be maintained in a clean, a. sanitary condition at all times and must be cleaned at least daily in accordance with the approved Operational Plan.
  - b. Waste must only be deposited on a "tipping floor" or directly into a transfer container. Waste must not be stored on the "tipping floor" after operating hours.
  - c. Waste may be stored on-site, in leak proof transfer trailers, with watertight covers. a maximum of 24 hours except that a minimal amount of waste may be stored for a maximum of 72 hours when the facility is closed during a weekend or holiday. Storage of the waste must not cause any nuisance, such as odor or attraction of vectors.
  - d. Effective vector control measures must be applied at all times to control any potential vectors including flies, rodents, insects, and other vermin.
  - Control measures must be utilized to minimize and eliminate visible dust e. emissions and blowing litter.
    - i) Fugitive dust emissions are prohibited.
    - Windblown materials must be collected by the end of the day and no ii) windblown material may be allowed to leave the facility boundary.
- All water that comes in contact with solid waste, including vehicle wash-down water, is 9. leachate and must be captured and properly treated before release to the environment.
  - The leachate control system, such as floor drains, leachate collection devices, a. sanitary sewer connections and leachate storage tanks, must be operational during facility operations.

Page 9 of 16

- b. The tipping floor must drain away from the building entrance and into the leachate collection system.
- 10. All sedimentation and erosion control activities must be conducted in accordance with the Sedimentation Control Act N.C.G.S. 113A-50, et seq., and rules promulgated under 15A NCAC 4.
- 11. Copies of this permit, the approved plans and all records required to be maintained by the permittee must be maintained at the facility, unless otherwise approved by the Section, and made available to the Section upon request during normal business hours.
- 12. The permittee must maintain a record of the amount of solid waste received at the facility, including daily records of waste received and origins of the loads. Scales must be used to weigh the amount of waste received. The daily records are to be summarized into a monthly report for use in the required annual reports.
- On or before August 1 annually, the Permittee must submit an annual facility report to the Solid Waste Section, on forms prescribed by the Section.
  - a. The reporting period shall be for the previous year beginning July 1 and ending June 30.
  - b. The annual facility report must list the amount of waste received in tons and be compiled:
    - i) On a monthly basis.
    - ii) By county, city or transfer station of origin.
    - iii) By specific waste type.
    - iv) By receiving disposal facility.
    - v) By diversion to alternative management facilities.
  - c. The completed report must be forwarded to the Regional Environmental Specialist for the facility by the date due on the prescribed annual facility report form.
  - d. A copy of the completed report must be forwarded to each county manager for each county from which waste was received the facility. Documentation that a copy of the report has been forwarded to the county managers must be sent to the Regional Environmental Specialist by the date due on the prescribed annual facility report form.

PART VII- MISCELLANEOUS SOLID WASTE MANAGEMENT

**General Conditions** 

- 14. Wastes received and product stored shall be maintained in reasonably sized piles with adequate fire breaks and lanes in accordance with the approved operational plans and the pertinent rules.
- 15. Surface water shall be diverted from all operational and storage areas to prevent standing water in operational areas and under or around storage piles. Water that comes in contact with solid waste shall be contained on-site or properly treated prior to discharge.
- 16. These areas shall be operated and maintained with sufficient dust control measures to minimize airborne emissions and to prevent dust from becoming a nuisance or safety hazard.
- 17. These areas shall be operated and maintained in a manner so as to minimize odors, prevent the creation of a nuisance, potential health hazard, or a potential fire hazard.
- 18. Effective vector control measures shall be applied as necessary to control flies, rodents, insects, or vermin.
- 19. The facility must manage all operations according to all applicable statutes and rules of the State of North Carolina.

#### Operational Conditions - White Goods

- 20. The facility is permitted to receive white goods as defined in North Carolina General Statute Article 9, Chapter 130A-290(44).
- 21. The facility must manage white goods according to the Operation Plan included in Attachment I, Part VI, "List of Documents for the Approved Plan". This document is included in the approved plan. Any revisions to the approved plan shall be approved by the North Carolina Division of Waste Management (DWM), Solid Waste Section, prior to implementation.
- 22. White goods collection areas shall provide for the proper removal of chlorofluorocarbon refrigerants.

#### Operational Conditions – Tires

- 23. The facility is permitted to receive tires and scrap tires as defined in North Carolina General Statute Article 9, Chapter 130A-309.53(6) & (7).
- 24. Scrap tire collection areas shall be operated in accordance with the requirements of 15A NCAC 13B, Rule .1107.
- 25. The facility must manage tires according to the Operation Plan included in Attachment I, Part VI, "List of Documents for the Approved Plan". This document is included in the approved plan. Any revisions to the approved plan shall be approved by the North Carolina Division of Waste Management (DWM), Solid Waste Section, prior to implementation.

Facility Permit No: 5704 Macon County

Error! Reference source not found.: May 15, 2013

Doc ID: 18851 Page 11 of 16

Operational Conditions – Small Type 1 Compost Facility

- 26. This facility is permitted to operate a small Type 1 compost facility as defined in 15A NCAC 13B, Rule .1402(f)(1).
- 27. The facility is only permitted to receive yard and garden waste, silviculture waste, land clearing waste, untreated and unpainted wood waste or any combination thereof.
- 28. The compost facility shall be operated in accordance with the requirements of 15A NCAC 13B, Rule .1400.
- 29. The facility must the compost facility according to the Operation Plan included in Attachment I, Part VI, "List of Documents for the Approved Plan". This document is included in the approved plan. Any revisions to the approved plan shall be approved by the North Carolina Division of Waste Management (DWM), Solid Waste Section, prior to implementation.

- End of Section-

Facility Permit No: 5704 Macon County Error! Reference source not found.: May 15, 2013 Doc ID: 18851 Page 12 of 16

# ATTACHMENT 4 CONDITIONS OF PERMIT FOR CLOSURE

PART I: GENERAL FACILITY

Not Applicable

PART II: MUNICIPAL SOLID WASTE LANDFILL UNIT(S)

Not Applicable

PART III: CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL UNIT(S)

- 1. The owner must provide post-closure care and monitoring for the landfill. The post-closure period begins August 31, 2009. After at least five years of post-closure care and monitoring, the landfill owner may submit a written request to modify or discontinue post-closure care and monitoring, depending upon the results of the previous monitoring. However, the owner must continue to conduct water quality monitoring, landfill gas monitoring, and post-closure care until the Section provides written approval to discontinue monitoring and/or post-closure care.
- 2. The C&D landfill stopped receiving waste on June 30, 2008 and closure was certified on August 31, 2009.
- 3. The landfill owner must maintain the integrity and effectiveness of the cap system, including making repairs to the cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and prevent surface water from impounding over waste and run-on and run-off from eroding or otherwise damaging the cap system. Mowing of vegetation on the landfill cover is required at least once per year. Trees on the final cover must be removed at least once per year.
- 4. The owner must maintain permanent markers that accurately identify the edge of the waste disposal boundary.
- 5. Public access to the landfill must be prevented by gates, fences, and/or other measures. The owner must maintain the public access preventive measures during the post-closure period.
- 6. Any post-closure use of the property, including but not limited to, residential, commercial, industrial, agricultural, or recreational use, is subject to review and approval by the Section and must not disturb the integrity of the cap system, or the function of the monitoring systems. The Section may approve any other disturbance if the owner or operator submits a modified post-closure plan which describes the planned use of the property and demonstrates that disturbance of the cap system, including any removal of waste, will not increase the potential threat to human health or the environment. Post-

closure uses approved by the Section will be included in the List of Approved Documents.

- 7. All sedimentation and erosion control activities must be conducted in accordance with the Sedimentation Control Act N.C.G.S. 113A-50, et seq., and rules promulgated under 15A NCAC 4. All required sedimentation and erosion control measures must be installed and operable to mitigate excessive on-site erosion and to prevent silt from leaving the area of the landfill unit.
- 8. The owner or operator must ensure that the landfill units do not violate any applicable requirements developed under a State Implementation Plan approved or promulgated by the U.S. EPA Administrator pursuant to Section 110 of the Clean Air Act, as amended.

#### Monitoring and Reporting Requirements

- 9. Groundwater quality at the facility is subject to "Classifications and Water Quality Standards Applicable to the Groundwaters of North Carolina," 15A NCAC 2L. This includes, but is not limited to, the provisions for detection monitoring, assessment, and corrective action.
- 10. Ground water monitoring wells and surface water sampling location(s) must be sampled on a semi-annual basis, in accordance with the current policies and guidelines of the Section in effect at the time of sampling, unless otherwise specified by the Section. Any proposed modification to an approved plan must be submitted to the Section and approved prior to implementation. Sampling equipment and methods must conform to specifications in the "Solid Waste Section Guidelines for Groundwater, Soil, and Surface Water Sampling," dated April 2008, available on the Section website.
- 11. Monitoring reports of the analytical results for surface water and groundwater monitoring sampling events must be submitted to the Section within 120 days of the sample collection date. Analytical laboratory data must be submitted in electronic format (pdf or tiff) and in a spreadsheet format in an Electronic Data Deliverable (EDD) Template. All monitoring reports must contain:
  - a. a potentiometric surface map for the current sampling event that also includes surface water sampling locations,
  - b. analytical laboratory reports and summary tables,
  - c. a completed Solid Waste Environment Monitoring Data Form, and
  - d. laboratory data submitted in accordance with the EDD Template.
- 12. The owner must monitor landfill gas to ensure that the closed site continues to meet the design standards for landfill gas found in 15A NCAC 13B .0503(2)(a). The concentration of explosive gases generated by the site must not exceed:

Facility Permit No: 5704

Macon County

Error! Reference source not found.: May 15, 2013 Doc ID: 18851

Page 14 of 16

a. twenty-five percent of the limit for the gases in site structures (excluding gas control or recovery system components); and

- b. the lower explosive limit for the gases at the property boundary.
- 13. Landfill gas monitoring must be conducted quarterly, unless otherwise specified by the Section. Landfill gas monitoring should follow "Landfill Gas Monitoring Guidance Document," as provided on the Section webpage. Any proposed modification to an approved landfill gas monitoring plan must be submitted to the Section and approved prior to implementation.
- 14. All landfill gas monitoring must be conducted by properly trained personnel and must include monitoring for hydrogen sulfide. Landfill gas monitoring must include interior monitoring of onsite buildings. Landfill gas monitoring equipment must be calibrated according to the manufacturer's specifications. Verification of the calibration of the landfill gas monitoring equipment is required. Landfill gas monitoring results must be recorded on forms provided by the Section and must be maintained within the facility's operating record.
- 15. The owner must maintain the integrity of all groundwater and landfill gas monitoring wells, including making repairs to well heads, covers, and surface pads, during the post-closure period.
- 16. A readily accessible unobstructed path must be maintained so that groundwater and landfill gas monitoring wells and surface water sampling locations are accessible using four-wheel drive vehicles.
- 17. Each groundwater monitoring well and landfill gas well must be surveyed for location and elevation. Each groundwater monitoring well and landfill gas monitoring well must have an identification plate permanently attached to the well, in accordance with 15A NCAC 2C .0108(o).
- 18. If a new well is required to be installed, either to add to the network or to replace an existing well, or if a well is required to be abandoned:
  - a. The permittee must obtain approval from the Section for the design, installation, and abandonment of any groundwater or landfill gas monitoring well. A licensed geologist must be present to supervise the installation of groundwater monitoring wells and landfill gas monitoring wells. The exact locations, screened intervals, and nesting of the wells must be established after consultation with the Section Hydrogeologist at the time of well installation.
  - b. Within 30 days of completed construction of each new groundwater and landfill gas monitoring well, a well construction record, well schematic, boring log, field log and notes, and description of well development activities must be submitted to the Section. Form GW-1 must be used for both groundwater and landfill gas

Page 15 of 16

wells. The submittal must also include a scaled topographic map, showing the location and identification of new, existing, and abandoned wells and piezometers, and hydraulic conductivity and effective porosity values.

- c. Hydraulic conductivity and effective porosity values must be established for each screened interval at each monitoring well in order to develop groundwater flow characteristics.
- d. Within thirty (30) days of the abandonment of any groundwater monitoring well, the well abandonment record (GW-30 form) and any additional information included in the abandonment record must be certified by a Licensed Geologist, and submitted to the Section. A copy of the well abandonment records submitted to the Division of Water Quality, consistent with 15A NCAC 2C .0114(b), must be submitted to the Section.
- e. Within thirty (30) days of the abandonment of a landfill gas monitoring well, an abandonment record must be submitted to the Section. The boring must be abandoned in accordance with 15A NCAC 2C .0113(d) and be certified by a Licensed Geologist.

#### Reporting and Recordkeeping

- 19. Documentation of well completion, development details, repair, abandonment, and all other pertinent activities associated with each groundwater and landfill gas monitoring well must be maintained in the facility operating record. The permittee must maintain a record of all groundwater, surface water, and landfill gas monitoring events and analytical data in the operating record.
- 20. Copies of this permit, the approved plans, and all records required to be maintained in the operating record by the permittee must be maintained at a location approved by the Section and made available to the Section upon request during normal business hours.
- 21. All forms, reports, maps, plans, and data submitted to the Section must include an electronic (pdf) copy.

PART IV: INDUSTRIAL LANDFILL UNIT(S)

Not Applicable

PART V: LAND CLEARING AND INERT DEBRIS LANDFILL UNIT(S)

Not Applicable

PART VI: TRANSFER STATION/TREATMENT & PROCESSING UNIT(S)

Not Applicable

PART VII: MISCELLANEOUS SOLID WASTE MANAGEMENT

Facility Permit No: 5704 Macon County Error! Reference source not found.: May 15, 2013 Doc ID: 18851

Page 16 of 16

Not Applicable

- End of Permit Conditions -